ABSTRACT

Systems and methods for managing the processing of the same pieces of information, e.g., messages, by multiple consumers, in a prescribed order, without causing the degradation of any consumer's performance because of other consumers' access to the same information. A single information queue contains pieces of information to be accessed by multiple consumers. Each piece of information is stored in the information queue along with an information identifier that uniquely identifies the piece of information. A separate table is used to keep track of and identify the pieces of information in the information queue that have been accessed by respective consumers. This separate table is decoupled from the information queue, and, thus, each consumer's access of a piece of queued information does not impact any other consumer's access of the same piece of information. A deletion process may also be executed, in the background if desired, which uses a working list table that identifies the pieces of information that have been accessed. With the working list table and the separate table, the deletion process identifies the pieces of information that have been accessed by all the respective consumers, and deletes them from the information queue.